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EXAMINER BORSETTI, GREG				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,360

Applicant(s)

SUGIYAMA ET AL.

Examiner

GREG A. BORSETTI

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 60-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 7/12/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 60-75 are pending.
2. Claims 60-62, 65, 67, 73-75 have been amended.
3. The 35 USC 101 rejection of claims 60-66 are withdrawn in view of the amendments received 7/12/2010.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/12/2010 has been entered.

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

6. The Information Disclosure Statement (IDS) submitted on 7/12/2010 is in compliance with the provisions of 37 CFR 1.97.

Claim Objections

7. Claim 73 is objected to for the following reasons: Upon further consideration, claim 73 had been amended to read "A computer-readable medium..." where the term "medium" was not defined within the specification to understand the metes and bounds of the term. The specification does have support for "A computer-readable memory..." to overcome this objection. Appropriate correction is required.
8. Claims 60, 67, 73-75 are objected to for the following informalities: The added limitation, "the plurality of types of sentence..." should be "the plurality of types of sentences..." Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 73 is rejected under 35 USC 101 for being directed to non-statutory subject matter. The claim recites "A computer-readable medium for storing computer executable instructions..." However, since the specification does not define the medium

to clearly include only statutory elements, the claim may be directed to both statutory and non-statutory embodiments. When a claim is directed to both statutory and non-statutory subject matter, a 35 USC 101 rejection is proper. The Examiner suggests amending the claim in concordance with the OG notice (2/23/2010) to include "non-transitory". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 60, 67, and 73-74 are rejected under 35 U.S.C. 102(e) as being anticipated by Papineni et al. (US Patent #6246981)

As per claim 60, Papineni teaches the method comprising:

receiving inputted text with an information processing device; (column 1, lines 22-30, ...*The input and output could be either text-oriented or speech-oriented. Speech-oriented systems have a speech recognition subsystem (speech-to-text system) and a speech synthesis subsystem (text-to-speech system)*...

analyzing the inputted text with an information analysis device to determine information to be added comprising the steps of: (column 3, lines 8-19, ...*A system for conversant interaction includes a recognizer for receiving and processing input information and outputting a recognized representation of the input information. A dialog manager is coupled to the recognizer for receiving the recognized representation of the input information, the dialog manager having task-oriented forms for associating user input information therewith, the dialog manager being capable of selecting an applicable form from the task-oriented forms responsive to the input information...*)

classifying the inputted text as one of a plurality of types of sentences, the plurality of types of sentence including a question and an explanation;
(Papineni, column 15, the example shows input questions and explanations, see ...*how about the vanguard index...* (question), and ...*i want to buy one hundred shares...* (explanation).)

selecting a category of additional information related to the type of sentence, the category being an expression which is suitable to the type of sentence; and
(Papineni, column 15, shows selection of additional information related to the type of sentence through a confirmation, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...*)

selecting additional information in the selected category; and
(Papineni, column 15, selects additional information by providing specific confirmations of the index or fund, ...*confirming purchase of one hundred Shares of vanguard index*

trust total stock market institutional shares. please say yes or no (fund name from context)... The selected additional information is the specific amount and fund for the category of additional information (confirmation).)

adding the additional information to the inputted text with a change processing device; and outputting the inputted text to which the information is added with an information reproducing device. (Papineni, column 15, selects additional information by providing specific confirmations of the index or fund, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...* The selected additional information is the specific amount and fund for the category of additional information (confirmation). This has been added to the fund name which is taken from the context taken from the inputted text and it output to the user for confirmation.)

Claims 67 and 73-74 are rejected for the same reasons as claim 60 above for having similar limitations and scope. Papineni further provides system and computer readable medium type embodiments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 60-64, 66-70, 72-75 are rejected under 35 U.S.C. 103(a) as being unpatentable by Gabai et al. (US Patent #6773344 hereinafter Gabai) in view of Papineni et al. (US Patent #6246981)

As per claim 60, Gabai teaches the method comprising:

receiving inputted text with an information processing device; (column 43, lines 20-34, the toy can read text for translation or speech synthesis.)

analyzing the inputted text with an information analysis device to determine information to be added comprising the steps of: (Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Gabai teaches the ability to read local or ancient languages, column 43, lines 20-34 where the scanner is an information analysis unit. Information to be added is appropriate to a given situation.)

adding the additional information to the inputted text with a change processing device; (Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes. Figs. 14 and 70 show that the output can

be processed and generated from the internal toy process or an external computer/server depending on the complexity of the input/operation.)

outputting the inputted text to which the information is added with an information reproducing device. (Gabai, column 53, lines 26-36, ...*Their response includes, but is not limited to sound (including voice)...* Fig. 66, 8085)

Gabai fails to specifically teach, but Papineni teaches:

classifying the inputted text as one of a plurality of types of sentences, the plurality of types of sentence including a question and an explanation;
(Papineni, column 15, the example shows input questions and explanations, see ...*how about the vanguard index...* (question), and ...*i want to buy one hundred shares...* (explanation).)

selecting a category of additional information related to the type of sentence, the category being an expression which is suitable to the type of sentence; and
(Papineni, column 15, shows selection of additional information related to the type of sentence through a confirmation, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...*)

selecting additional information in the selected category; and
(Papineni selects additional information by providing specific confirmations of the index or fund, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...* The

selected additional information is the specific amount and fund for the category of additional information (confirmation).)

Gabai and Papineni are analogous art because both deal with dialog interaction between a human and machine. Gabai (column 43, lines 35-50) provides a base process of dialog interaction where the claimed invention can be seen as an improvement to confirm understanding between the machine and user. Papineni provides a known technique of providing confirmations and clarifications to assist the machine and human have a better mutual understanding of the pending dialog (column 4, lines 1-20 and column 15). It would have been obvious to someone of ordinary skill in the art at the time of the invention to apply the confirmations/clarifications of Papineni with the base process of dialog interaction in Gabai because the result would have been predictable in providing a machine/user dialog interaction where the machine and user have a mutual understanding of the current dialog state. Therefore, it would have been obvious to someone of ordinary skill in the art at the time of the invention to combine Papineni with Gabai.

As per claim 61, claim 60 is incorporated and Gabai teaches:

wherein the inputted text is translation text that is translated from a first language to a second language with an automatic interpretation device. (Gabai, column 43, lines 3-19, Figs. 58 A-B teach that the toy interprets the scanned information in a language not native to the user for the user's understanding.)

As per claim 62, claim 60 is incorporated and Gabai teaches:

wherein a voice synthesis device converts the inputted text to which the information is added to a voice signal and outputs the voice signal. (Gabai, column 20, lines 14-36, ...*transfer information to the user through sound (possibly using text-to-speech technology)*...)

As per claim 63, claim 60 is incorporated and Gabai teaches:

wherein amount of information to be added is determined on the basis of an analysis result. (Gabai, column 43, lines 44-50, ...*translating an ancient inscription a toy offers its user a historical commentary on the period and the occasion on which it was written and the subjects it concerns*..., There is inherently a determined amount of available additional information because the database stores available additional information in the database that is retrieved based upon the analysis.)

As per claim 64, claim 60 is incorporated and Gabai teaches:

where the information is prestored corresponding to a keyword. (Gabai, column 46, lines 40-67, the toy listens for keywords in its analysis to understand the input and produce the appropriate response. Also, example II (columns 45-46) shows that the information is related to the input keywords.)

As per claim 66, claim 62 is incorporated and Gabai teaches:

wherein the information is information for prompting a target.

(Gabai, columns 45-46, Example II, teaches that information is added for prompting a target using voice, column 46, lines 1-5).

As per claim 67, Gabai teaches:

an information processing device for receiving inputted text, having an information changing unit for analyzing the inputted text to determine information to be added comprising the steps of: (Gabai, column 43, lines 20-34, ...*special scanner*... Further, Gabai, column 43, lines 3-19, ...*It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation*... Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes.)

adding the additional information to the inputted text with a change processing unit; (Gabai, column 43, lines 3-19, ...*It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation*...Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes. Figs .14 and 70 show that the output can be processed an generated from the internal toy process or an external computer/server depending on the complexity of the input/operation.)

and an information reproducing device for converting and output from the information changing unit to voice. (Gabai, column 53, lines 26-36, ...*Their*

response includes, but is not limited to sound (including voice)...)

Gabai fails to specifically teach, but Papineni teaches:

classifying the inputted text as one of a plurality of types of sentences, the plurality of types of sentence including a question and an explanation;
(Papineni, column 15, the example shows input questions and explanations, see ...*how about the vanguard index...* (question), and ...*i want to buy one hundred shares...* (explanation).)

selecting a category of additional information related to the type of sentence, the category being an expression which is suitable to the type of sentence; and
(Papineni, column 15, shows selection of additional information related to the type of sentence through a confirmation, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...*)

selecting additional information in the selected category
(Papineni selects additional information by providing specific confirmations of the index or fund, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...* The selected additional information is the specific amount and fund for the category of additional information (confirmation).)

Gabai and Papineni are analogous art because both deal with dialog interaction between a human and machine. Gabai (column 43, lines 35-50) provides a base

process of dialog interaction where the claimed invention can be seen as an improvement to confirm understanding between the machine and user. Papineni provides a known technique of providing confirmations and clarifications to assist the machine and human have a better mutual understanding of the pending dialog (column 4, lines 1-20 and column 15). It would have been obvious to someone of ordinary skill in the art at the time of the invention to apply the confirmations/clarifications of Papineni with the base process of dialog interaction in Gabai because the result would have been predictable in providing a machine/user dialog interaction where the machine and user have a mutual understanding of the current dialog state. Therefore, it would have been obvious to someone of ordinary skill in the art at the time of the invention to combine Papineni with Gabai.

Claims 68, 69 are rejected for the same reasons as claims 61, 63.

As per claim 70, claim 67 is incorporated and Gabai teaches:

wherein the information changing unit comprises a memory device for storing the information corresponding to a keyword, extracts the keyword from the inputted text and selects the information stored into the memory device on the basis of the extracted keyword. (Gabai, column 46, lines 40-67, the toy listens for keywords in its analysis to understand the input and produce the appropriate response. Also, example II (columns 45-46) shows that the information is related to the input keywords.)

Claim 72 is rejected for the same reasons as claims 66.

Claims 73-74 are rejected for similar reasons to claims 60 and 67. Claim 73 is the computer readable medium claim for the method of claim 60. The apparatus in claim 67 has been shown to be a computer based apparatus which inherently has to be programmed and executed from a computer-readable medium. Claims 74-75 are the terminal and server claims for the method and apparatus of claims 60 and 67.

As per claim 75, Gabai teaches the server comprising:

a communication device for communicating with a terminal; (Gabai, abstract, teaches that the toy can use cellular technology which is well known in the art to be able to independently process input as well as process the input through a server.)

an information processing device for translating text received through the communication device from first language to second language; (column 43, lines 20-34, the toy can read text for translation or speech synthesis. Gabai, column 43, lines 3-19, Figs. 58 A-B teach that the toy interprets the scanned information in a language not native to the user for the user's understanding.)

an information changing unit for analyzing the text translated to the second language, determining information to be added on the basis of the analysis result comprising the steps of: (Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Gabai teaches the ability to read

local or ancient languages, column 43, lines 20-34 where the scanner is an information analysis unit. Information to be added is appropriate to a given situation.)

adding the information to the text translated to the second language;
(Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes. Figs. 14 and 70 show that the output can be processed and generated from the internal toy process or an external computer/server depending on the complexity of the input/operation.)

transmitting an output from information changing unit through the communication device. (Gabai, column 53, lines 26-36, *...Their response includes, but is not limited to sound (including voice)... Fig. 66, 8085)*

Gabai fails to specifically teach, but Papineni teaches:

classifying the inputted text as one of a plurality of types of sentences, the plurality of types of sentence including a question and an explanation;
(Papineni, column 15, the example shows input questions and explanations, see *...how about the vanguard index...* (question), and *...i want to buy one hundred shares...* (explanation).)

selecting a category of additional information related to the type of sentence, the category being an expression which is suitable to the type of sentence; and

(Papineni, column 15, shows selection of additional information related to the type of sentence through a confirmation, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...*)

selecting additional information in the selected category and adding the information to the text (Papineni selects additional information by providing specific confirmations of the index or fund, ...*confirming purchase of one hundred Shares of vanguard index trust total stock market institutional shares. please say yes or no (fund name from context)...* The selected additional information is the specific amount and fund for the category of additional information (confirmation). This has been added to the fund name which is taken from the context taken from the inputted text and it output to the user for confirmation.)

Gabai and Papineni are analogous art because both deal with dialog interaction between a human and machine. Gabai (column 43, lines 35-50) provides a base process of dialog interaction where the claimed invention can be seen as an improvement to confirm understanding between the machine and user. Papineni provides a known technique of providing confirmations and clarifications to assist the machine and human have a better mutual understanding of the pending dialog (column 4, lines 1-20 and column 15). It would have been obvious to someone of ordinary skill in the art at the time of the invention to apply the confirmations/clarifications of Papineni with the base process of dialog interaction in Gabai because the result would have been predictable in providing a machine/user dialog interaction where the machine and user

have a mutual understanding of the current dialog state. Therefore, it would have been obvious to someone of ordinary skill in the art at the time of the invention to combine Papineni with Gabai.

12. Claims 65 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable by Gabai et al. (US Patent #6773344 hereinafter Gabai) in view of Papineni et al. (US Patent #6246981) and further in view of Uwakubo. (US Patent #6513011).

As per claim 65, claim 62 is incorporated and Gabai and Papineni fail to specifically teach, but Uwakubo teaches:

further comprising analyzing reaction time of a target for which the voice is output (Uwakubo, columns 7-8, lines 63-67 and 1-8, *...a time period is clocked in some times, from a time when a reaction is presented to the output unit 360 (to the user) to another time when the user starts action in response to the presented reaction...*)

and determining the information on the basis of the analysis result with the information analysis unit. (Uwakubo, column 8, lines 21-31, *...generate reactions or suspends the generating of the reactions, based on instructions from the conversation manage unit 330... A reaction is generated based upon the reaction time of the user.*)

It would have been obvious to someone of ordinary skill in the art at the time of the invention to combine Uwakubo with the Gabai and Papineni device because "prior devices can not follow changes of a length of a pause (timing) in a conversation"

(Uwakubo, column 1, lines 38-42) The combination of Uwakubo with the Gabai and Papineni device would have been obvious to try because it improves smooth information transition and has a reasonable expectation of success.

Claim 71 is rejected for the same reasons as claim 65.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to PTO-892, Notice of References Cited for a listing of analogous art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885, (FAX: 571-270-4885). The examiner can normally be reached on Monday - Thursday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/
Examiner, Art Unit 2626

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626